

CLAIMS:

What Is Claimed Is:

1. An information processing device which exchanges information with other information processing devices via a network, said information processing device comprising:

5 first input/output control means for controlling input and output of information to and from a first other information processing device of a user;

second input/output control means for controlling input and output of information to and from a second another information processing device;

10 substituting means for substituting personal information of said user contained in first information of which input is controlled by said first input/output control means with second information corresponding to said personal information of said user on a one-to-one basis; and

first recording control means for controlling recording of said personal information of said user and said second information such that said personal information of said user and said second information are recorded in a corresponding manner;

15 wherein said user is registered as a member of a predetermined group; and

wherein said second information is determined corresponding to said group; and

wherein said second input/output control means controls output to said second other information processing device of said first information wherein said personal information of said user is substituted with said second information by said substituting means.

20 2. An information processing device according to Claim 1, wherein said personal information of said user is an e-mail address of said user.

3. An information processing device according to Claim 1, further comprising generating means for generating said second information using a hash function.

4. An information processing device according to Claim 1, further comprising searching means for searching operational information of said user regarding which recording is controlled by said first recording means based on said second information contained in a third information which is a reply to said first information regarding which input is controlled by said second input/output control means;

wherein said first input/output control means controls output of said third information to said first other information processing device, based on said personal information of said users searched by said searching means.

5. An information processing device according to Claim 1, further comprising:
second recording control means for controlling recording of personal attributes information of said user; and

third recording control means for controlling recording of information identifying said group and attribute information of said group;

wherein said attribute information of said group contains, of said personal attribute information regarding which recording is controlled by said second recording control means, a predetermined number of sets of personal attribute information common to a plurality of said users registered to said group, in descending order of degree held in common.

6. An information processing device according to Claim 5, further comprising verifying means for verifying permission for access to said attribute information of said group regarding which recording is controlled by said third recording control means;

wherein said verifying means verifies permission for access to said attribute information of said group based on a contract between said group and the holder of said second other information processing device.

7. An information processing device according to Claim 6, further comprising searching means for searching for said attribute information of said group regarding which recording is controlled by said third recording control means, based on information for identifying said group regarding which input is controlled by said second input/output control means, in the event that said verifying means verifies the permission to access of said second other information processing device;

wherein said second input/output control means controls output of said attribute information of said group searched by said searching means, to said second other information processing device.

8. An information processing device according to Claim 6, further comprising searching means for searching for information for identifying said group regarding which recording is controlled by said third recording control means, based on information corresponding to said attribute information of said group contained in a fourth information regarding which input is controlled by said second input/output control means, in the event that said verifying means verifies the permission to access of said second other information processing device.

9. An information processing device according to Claim 8, wherein said second input/output control means controls the output of information for identifying said group searched by said searching means to said second other information processing device.

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10. An information processing device according to Claim 8, wherein said first input/output control means controls the output of said fourth information to said first other information processing device which said user registered to said group has, based on information for identifying said group searched by said searching means.

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11. An information processing device according to Claim 5, further comprising:

third input/output control means for controlling input and output of information to and from a third other information processing device;

verifying means for verifying permission to access personal attribute information of said user regarding which recording is controlled by said second recording control means; and

first searching means for searching said personal attribute information of said user regarding which recording is controlled by said second recording control means, based on fifth information regarding which input is controlled by said third input/output control means, in the event that said verifying means verifies permission to access a third other information processing device;

wherein said third input/output control means controls the output of said personal attribute information of said user searched by said first searching means to said third other information processing device.

12. An information processing device according to Claim 11, wherein said verifying means verifies permission for access to said personal attribute information of said user registered to said group, based on a contract between the holder of said third other information processing device and
5 said group.

13. An information processing device according to Claim 12, further comprising second searching means for searching for said holder of said third other information processing device which has entered into contract with said group, based on said second information regarding which input is controlled by said second input/output control means.

14. An information processing method for an information processing device which exchanges information with other information processing devices via a network, said method comprising:

15 a first input/output control step for controlling input and output of information to and from a first another information processing device held by a user;

a second input/output control step for controlling input and output of information to and from a second another information processing device;

20 a substituting step for substituting personal information of said user contained in first information of which input is controlled by the processing of said first input/output control step with second information corresponding to said personal information of said user on a one-to-one basis; and

a first recording control step for controlling recording of said personal information of said user and said second information such that said personal information of said user and said second information are recorded in a corresponding manner;

wherein said user is registered as a member of a predetermined group;

5 and wherein said second information is determined corresponding to said group;

and wherein output to said second other information processing device of said first information, wherein said personal information of said user is substituted with said second information by the processing of said substituting step, is controlled in said second input/output control step.

10 15. A program for an information processing device which exchanges information with other information processing devices via a network, said program comprising code for:

a first input/output control step for controlling input and output of information to and from a first another information processing device of a user;

15 a second input/output control step for controlling input and output of information to and from a second another information processing device;

20 a substituting step for substituting personal information of said user contained in first information of which input is controlled by the processing of said first input/output control step with second information corresponding to said personal information of said user on a one-to-one basis; and

a first recording control step for controlling recording of said personal information of said user and said second information such that said personal information of said user and said second information are recorded in a corresponding manner;

wherein said user is registered as a member of a predetermined group;
and wherein said second information is determined corresponding to said group;
and wherein output to said second other information processing device of said first
information, wherein said personal information of said user is substituted with said second
5 information by said substituting step, is controlled in said second input/output control step.

16. A service providing system, comprising:

a first information processing device which exchanges information with other information
processing devices via a network;

10 a second information processing device which a user has; and

a third information processing device which a corporation has;

said first information processing device comprising:

first input/output control means for controlling input and output of information to
and from said second information processing device,

15 second input/output control means for controlling input and output of information to
and from said third information processing device,

substituting means for substituting personal information of said user contained in
first information of which input is controlled by said first input/output control means with second
information corresponding to said personal information of said user on a one-to-one basis, and

20 first recording control means for controlling recording of said personal information
of said user and said second information such that said personal information of said user and said
second information are recorded in a corresponding manner;

wherein said user is registered as a member of a predetermined group;

and wherein said second information is determined corresponding to said group;

and wherein said second input/output control means controls output to said third information processing device of said first information wherein said personal information of said user is substituted with said second information by said substituting means;

5 and wherein said second information processing device comprises:

third input/output control means for controlling input and output of information from and to said first information processing device;

wherein said third input/output control means controls output of said first information to said first information processing device;

10 and wherein said third information processing device comprises:

fourth input/output control means for controlling input and output of information from and to said first information processing device;

wherein said fourth input/output control means controls input of said first information from said first information processing device.

15 17. A service providing system according to Claim 16, wherein said first information processing device further comprises generating means for generating said second information using a hash function;

20 and wherein said third information processing device distinguishes said user having said second information processing device which has output said first information to said first information processing device, based on said second information contained in said first information regarding which input is controlled by said fourth input/output control means.

18. A service providing system according to Claim 16, wherein, with said third information processing device, said fourth input/output control means control output of a third information which is a reply to said first information containing said second information.

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19. A service providing system, comprising:

a first information processing device which exchanges information with other information processing devices via a network;

a second information processing device which a user has;

a third information processing device which a corporation has; and

a fourth information processing device which a distribution firm has;

said first information processing device comprising:

first input/output control means for controlling input and output of information to and from said second information processing device,

second input/output control means for controlling input and output of information to and from said third information processing device,

third input/output control means for controlling input and output of information to and from said fourth information processing device,

substituting means for substituting personal information of said user contained in first information relating to purchasing merchandise of which input is controlled by said first

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input/output control means with second information corresponding to said personal information of said user on a one-to-one basis, and

first recording control means for controlling recording of said personal information of said user and said second information such that said personal information of said user and said second information are recorded in a corresponding manner;

first searching means for searching said distribution firm which has entered into contract with a predetermined group, based on said second information regarding which input is controlled by said second input/output control means;

second recording control means for controlling recording of said personal attributes information of said user;

verifying means for verifying permission to access personal attribute information of said user regarding which recording is controlled by said second recording control means; and

second searching means for searching for said personal attributes information of said user regarding which recording is controlled by said second recording control means, in the event that said verifying means verifies permission of access for said fourth information processing device;

wherein said user is registered as a member of a predetermined group;

and wherein said second information is determined corresponding to said group;

and wherein said second input/output control means controls output to said third information processing device of said first information relating to purchasing merchandise wherein said personal information of said user is substituted with said second information by said substituting means;

and wherein said third input/output control means controls output to said fourth information processing device of said personal attributes information of said user searched by said second searching means;

and wherein said verifying means verifies permission to access said personal attributes information of said user registered to said group, based on the contract between said distribution firm and said group;

and wherein said second information processing device comprises:

5 fourth input/output control means for controlling input and output of information from and to said first information processing device;

wherein said fourth input/output control means controls output of said first information relating to purchasing merchandise to said first information processing device;

and wherein said third information processing device comprises:

10 fifth input/output control means for controlling input and output of information from and to said first information processing device;

wherein said fifth input/output control means controls input of said first information relating to purchase of said merchandise, from said first information processing device, and also control output to said first information processing device of signals for causing said first searching means to search for said distribution firm which has entered into contract with said group with which said user desiring to purchase said merchandise is registered, based on said second information contained in said first information relating to purchasing of said merchandise;

and wherein said fourth information processing device comprises:

20 sixth input/output control means for controlling input and output of information from and to said first information processing device;

wherein said sixth input/output control means control output to said first information processing device of signals for causing said second searching means to search for personal information of said user desiring to purchase said merchandise, and also control input of said

personal information of said user searched by said second searching means, from said first information processing device.

20. An information processing device which exchanges information with other information processing devices via a network, said information processing device comprising:

first recording control means for controlling recording of information relating to a community comprising a plurality of users;

communication service providing means for providing communication services to said plurality of users making up said community;

first input control means for controlling input of proposals to a corporation from a first other information processing device which an owner of said community has;

second recording control means for controlling recording of information relating to said proposal to said corporation regarding which input is controlled by said first input control means;

first output control means for controlling output to said second other information processing device which said corporation has of said proposal to said corporation regarding which recording is controlled by said second recording control means;

second input control means for controlling input of signals from said second other information processing device, indicating that said proposal to said corporation is accepted; and

second output control means for controlling output of signals indicating said proposal to said corporation is accepted to said first other information processing device;

wherein, in the event that input signals indicating said proposal to said corporation is accepted is controlled by said second input control means, said second recording control means

further controls recording of the name of the corporation which has accepted said proposal to said corporation.

21. An information processing device according to Claim 20, wherein said plurality of said
5 second other information processing devices each had by a plurality of said corporations are
connected to said network, and wherein said proposal to said corporation contains information
regarding said corporation which is the object of a proposal to said corporation, of said plurality of
corporations.

10 22. An information processing device according to Claim 20, further comprising billing
processing means for executing billing processing to said corporation, based on the number of
times that output of said proposal to said corporation to said second other information processing
device had by said corporation has been controlled by said first output control means.

15 23. An information processing device according to Claim 20, further comprising billing
processing means for executing billing processing to said corporation in the event that said
proposal to said corporation is established.

20 24. An information processing device according to Claim 23, wherein said billing
processing means executes billing processing to said corporation based on the number of times that
said proposal to said corporation is established.

25. An information processing device according to Claim 23, wherein said billing processing means executes billing processing to said corporation based on the amount of revenue of said corporation due to said proposal being established.

5 26. An information processing method for an information processing device which exchanges information with other information processing devices via a network, said method comprising:

 a first recording control step for controlling recording of information relating to a community comprising a plurality of users;

10 a communication service providing step for providing communication services to said plurality of users making up said community;

 a first input control step for controlling input of proposals to a corporation from a first other information processing device which an owner of said community has;

15 a second recording control step for controlling recording of information relating to said proposal to said corporation regarding which input is controlled by the processing in said first input control step;

 a first output control step for controlling output to said second other information processing device which said corporation has of said proposal to said corporation regarding which recording is controlled by the processing in said second recording control step;

20 a second input control step for controlling input of signals from said second other information processing device, indicating that said proposal to said corporation is accepted; and

 a second output control step for controlling output of signals indicating said proposal to said corporation is accepted to said first other information processing device;

wherein, in the event that input signals indicating said proposal to said corporation is accepted is controlled by the processing in said second input control step, recording of the name of the corporation which has accepted said proposal to said corporation is further controlled by the processing in said second recording control step.

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27. A program for an information processing device which exchanges information with other information processing devices via a network, said program comprising code for:

a first recording control step for controlling recording of information relating to a community comprising a plurality of users;

10 a communication service providing step for providing communication services to said plurality of users making up said community;

a first input control step for controlling input of proposals to a corporation from a first other information processing device which an owner of said community has;

15 a second recording control step for controlling recording of information relating to said proposal to said corporation regarding which input is controlled by the processing in said first input control step;

a first output control step for controlling output to said second other information processing device which said corporation has of said proposal to said corporation regarding which recording is controlled by the processing in said second recording control step;

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a second input control step for controlling input of signals from said second other information processing device, indicating that said proposal to said corporation is accepted; and

a second output control step for controlling output of signals indicating said proposal to said corporation is accepted to said first other information processing device;

wherein, in the event that input signals indicating said proposal to said corporation is accepted is controlled by the processing in said second input control step, recording of the name of the corporation which has accepted said proposal to said corporation is further controlled by the processing in said second recording control step.

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28. An information processing device which exchanges information with other information processing devices via a network, said information processing device comprising:

first recording control means for controlling recording of information relating to a community comprising predetermined users;

first input control means for controlling input of proposals to said community from a first other information processing device which a corporation has;

second recording control means for controlling recording of information relating to proposals to said community regarding which input is controlled by said first input control means;

first output control means for controlling output to said second other information processing device which said owner of said community has, of proposals to said community regarding which recording has been controlled by said second recording control means;

second input control means for controlling input of signals indicating accepting said proposal to said community from said second other information processing device; and

second output control means for controlling output to said first other information processing device, of signals indicating that said proposal to said community is accepted;

wherein, in the event that input of signals indicating that said proposal to said community is accepted is controlled by said second input control means, said second recording control means

further controls recording to the name of the community which has accepted said proposal to said community.

29. An information processing device according to Claim 28, further comprising third
5 output control means for controlling output of information to a plurality of third other information processing device which members of said community have;

wherein said proposal to said community is distribution of advertisements to members of said community;

and wherein said third output control means controls output of said advertisements to said
10 third other information processing devices.

30. An information processing device according to Claim 29, further comprising billing
processing means wherein billing processing to said corporation is executed based on the number
of advertisements distributed regarding which output is controlled by said third output control
15 means.

31. An information processing device according to Claim 28, further comprising billing
processing means wherein billing processing to said corporation is executed based on the number
of times proposals to said community are established.

20 32. An information processing device according to Claim 28, further comprising billing processing means wherein billing processing to said corporation is executed based on the amount of revenue of said corporation due to said proposal to said community being established.

33. An information processing method for an information processing device which exchanges information with other information processing devices via a network, said method comprising:

5 a first recording control step for controlling recording of information relating to a community comprising predetermined users;

 a first input control step for controlling input of proposals to said community from a first other information processing device which a corporation has;

10 a second recording control step for controlling recording of information relating to proposals to said community regarding which input is controlled by the processing in said first input control step;

 a first output control step for controlling output to said second other information processing device which said owner of said community has, of proposals to said community regarding which recording has been controlled by the processing in said second recording control step;

15 a second input control step for controlling input of signals indicating accepting said proposal to said community from said second other information processing device; and

 a second output control step for controlling output to said first other information processing device, of signals indicating that said proposal to said community is accepted;

20 wherein, in the event that input of signals indicating that said proposal to said community is accepted is controlled by the processing of said second input control step, recording of the name of the community which has accepted said proposal to said community is further controlled by the processing in said second recording control step.

34. A program for an information processing device which exchanges information with other information processing devices via a network, said program comprising code for:

a first recording control step for controlling recording of information relating to a community comprising predetermined users;

5 a first input control step for controlling input of proposals to said community from a first other information processing device which a corporation has;

a second recording control step for controlling recording of information relating to proposals to said community regarding which input is controlled by the processing in said first input control step;

10 a first output control step for controlling output to said second other information processing device which said owner of said community has, of proposals to said community regarding which recording has been controlled by the processing in said second recording control step;

a second input control step for controlling input of signals indicating accepting said proposal to said community from said second other information processing device; and

15 a second output control step for controlling output to said first other information processing device, of signals indicating that said proposal to said community is accepted;

wherein, in the event that input of signals indicating that said proposal to said community is accepted is controlled by the processing of said second input control step, recording of the name of the community which has accepted said proposal to said community is further controlled by the
20 processing in said second recording control step.

35. A service providing system, comprising:

a first information processing device which executes processing relating to the activity of a community comprising a plurality of users;

second information processing devices which said users have;

third information processing devices which corporations have; and

5 a fourth information processing device which a third-party organization for monitoring the activity of said community has;

said first information processing device comprising:

first recording control means for controlling recording of information relating to said community made up of said plurality of users,

10 communication service providing means for providing communication services to said plurality of users making up said community, and

first input/output control means for controlling input and output of information to and from said second through said fourth information processing devices;

said second information processing device comprising:

15 second input/output control means for controlling input and output of information to and from said first information processing device;

said third information processing device comprising:

third input/output control means for controlling input and output of information to and from said first information processing device, wherein said third input/output control means

20 control output of sending request for reliability information of said community to said fourth information processing device via said first information processing device; and

said fourth information processing device comprising

fourth input/output control means for controlling input and output of information to and from said first information processing device, and

generating means for generating said community reliability information based on information relating to said community regarding which recording is controlled by said first

5 recording controlled means, regarding which input is controlled by said fourth input/output control means;

wherein said fourth input/output control means control input of requests sent for said community reliability information, and control output of said community reliability information to said third information processing device via said first information processing device.

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